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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,321	12/04/2003	Tom Hopkins	HOP-1	7325

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ATTORNEY AT LAW
PO BOX 168
CLEMSON, SC 29633-0168

EXAMINER

FERGUSON, LAWRENCE D

ART UNIT	PAPER NUMBER
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1774

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/28/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/728,321

Applicant(s)

HOPKINS, TOM

Examiner

Lawrence D. Ferguson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 22-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment mailed October 30, 2006. Examiner regrets the untimely reopening of the case and withdraws the previous rejections to further prosecute the claimed invention. Claims 1-28 are pending with claims 22-28 withdrawn as non-elected invention.

Claim Rejections – 35 USC § 103(a)

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable Ewing (U.S. 6,407,034) in view of Ewing (U.S. 6,284,177) further in view of Limbach (U.S. 3,004,284).

Ewing discloses a thermally printable multilayer thermoplastic composite for use as a receipt tape comprising a printable layer of thermoplastic material having a first and second outer film surface, where the film has a thickness from about 0.5 to 6.0 mils along with several layers of thermoplastic materials (column 1, lines 58-67 and column 3, lines 11-40). Ewing teaches thermal coatings are conventionally applied to substrates (core layer) to produce receptive media

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which forms images that are heat sensitive (column 1, lines 13-15 and 22-28 and column 3, lines 52-58). The thermoplastic material is high density polyethylene (column 2, line 22 and 30-35). Because Ewing does not disclose the thermoplastic composite is non-heat shrinkable, it is expected that the composite of Ewing is non-heat shrinkable. Ewing does not disclose the first outer layer comprises an anti-static additive or antistatic coating or the core layer comprising a cavitation promoting additive.

Ewing '177 teaches a multilayer thermally printable thermoplastic composite for use as a sales receipt having a thickness of 0.5 to 3 mils having an anti-static additive (column 1, lines 9-11, lines 61-67; column 2, lines 4-20, 58-67 and column 4, lines 56-65). Ewing '177 further discloses the thermoplastic film comprises high density polyethylene, titanium dioxide and calcium carbonate (cavitation promoting additive) (column 3, lines 25-50 and column 4, lines 1-21). Both Ewing '034 and Ewing '177 are directed to multilayer thermoplastic printable media. It would have been obvious to one of ordinary skill in the art to have added an anti-static additive to the outer of the thermoplastic composite in order to reduce the amount of static electrical charge which amasses in the printable media (column 4, lines 28-31). Additionally, it would have been obvious to one of ordinary skill in the art to have added the conventional pigment of titanium dioxide and second additive of calcium carbonate with the high density polyethylene film of Ewing '034 to render the thermoplastic film suitable for use as a printable media, where the white color of titanium dioxide improves the readability of the printed film (column 3, lines 64-66 and column 4, lines 2-5).

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Neither Ewing '034 nor Ewing '177 teaches the composite is oriented or stretched. Limbach teaches stretching or orienting any stretchable thermoplastic film or sheet material comprising polymers such as polyethylene or polypropylene (column 7, lines 13-15 and 48-62) where biaxially stretching the film is conventional (column 1, lines 27-28). It would have been obvious to one of ordinary skill in the art to stretch the thermoplastic composite of Ewing '034 and '177 in a direction or directions to improve the mechanical and physical properties of the material (column 1, lines 17-21 and column 7, lines 48-53).

Response to Arguments

4. Applicant's argument regarding the rejection made under 35 U.S.C. 103(a) as being unpatentable over Davis et al. (U.S. 6,607,834) are moot based on grounds of new rejection.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Ferguson whose telephone number is 571-272-1522. The examiner can normally be reached on Monday through Friday 9:00 AM – 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye, can be reached on 571-272-3186. The fax

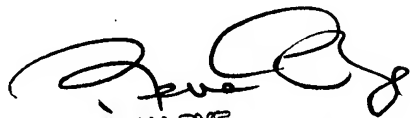
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phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



L. Ferguson
Patent Examiner
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RENA DYE
SUPERVISORY PATENT EXAMINER
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